

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029956**Date Inspected:** 27-Aug-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** USA Hoist**Location:** Crest Hill, IL

CWI Name:	Robert Zimny		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	Yes	No	N/A
Approved WPS:	Yes	No	N/A
Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** SAS Tower Elevator**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at USA Hoist, Crest Hill, IL as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At USA Hoist assembly shop, this QA randomly observed USA certified welder Manolo Luna perform 2F (horizontal) position gas shielded Flux Cored Arc Welding (FCAW-G) ¼" fillet welding ¼" thick gusset plate on various corners of the drive structure assembly. The welder was noted using gas shielded FCAW-G with 1.1mm E71T-1C/M-H8 Familiarc DW-50 wire electrode implementing USA Hoist Welding Procedure Specification FCAW 3210. The shielding gas being used was noted a combination of 75% Argon and 25% CO2 with flow rate of 35 CFH. During the shift, the working welding parameters were measured 27 volts and 200 amperes which deemed in compliance to the project requirements. At the end of the shift, fillet welding on the gusset plates to various locations of the structure was still continuing and should remain tomorrow.

During the shift while fillet welding was on going, this QA randomly performed visual and dimensional verification on the completed fillet and flare bevel welds on the rear vertical tube drive structure per shop drawing 916232-63 and front vertical tube drive structure per shop drawing 916232-64. The ¼" intermittent fillet and flare bevel welds between the ½" thick plate to the 2 ½" x 5 " x ¼" thick tube steel were welded according to the shop drawing and deemed in conformance to the contract requirements. Other welds for drive and tiltdrive mating weldment per shop drawing 916260 that were completed also noted acceptable.

All other activities related to the tower elevator include retapping of the threads on rack pads and tie in brackets of

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the 6" x 6" tower mast and removing excessive galvanizing on 2" diameter tube connectors. USA Hoist personnel were noted working on the removal of excessive galvanizing the whole shift and should continue for few more days. Also noted during the shift was the installation of the glass door to the elevator cab. According to the USA Hoist personnel, they were able to install the glass door assembly to the elevator cab without a major glitch.



Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas 916-764-6027, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Foerder, Mike

QA Reviewer